

Pb Free Plating Product

BYV26A thru BYV26G



1.0 AMP.ULTRA FAST RECOVERY RECTIFIERS

Features

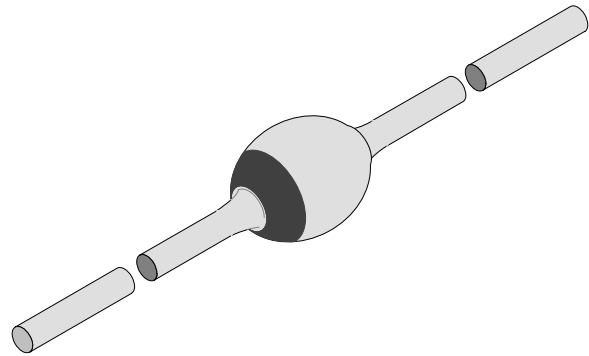
- Glass passivated junction
- Hermetically sealed package
- Very low switching losses
- Low reverse current
- High reverse voltage

Applications

Switched mode power supplies
High-frequency inverter circuits

SOD-57

Unit: inch(mm)



94 9539

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	BYV 26A	BYV 26B	BYV 26C	BYV 26D	BYV 26E	BYV 26G	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200V	400V	600V	800V	1000V	1400V	V
Maximum DC Blocking Voltage	V _{DC}	300V	500V	700V	900V	1100V	1500V	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T _A = 55 °C	I _(AV)	1.0						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30						A
Maximum Reverse Recovery Time (Note 1)	T _{rr}	30			75			nS
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =150 °C	I _R	5.0 100						uA uA
Maximum Instantaneous Forward Voltage @ 1.0A @ T _A =25 °C @ 1.0A @ T _A =175 °C	V _F	2.5 1.3						V
Maximum Reverse recovery Current Slope dI _r /dt @ IF=1A, VR=30V, dI _f /dt = 1A / uS	dv/dt	7						A/uS
Typical Junction Capacitance (Note 2)	C _j	45						pF
Typical Thermal Resistance (Note 3)	R θ _{JA}	40						°C /W
Operating Temperature Range	T _J	-55 to +175						°C
Storage Temperature Range	T _{STG}	-55 to +175						°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
 3. Mount on Cu-Pad Size 5mm x 5mm on PCB.

Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)

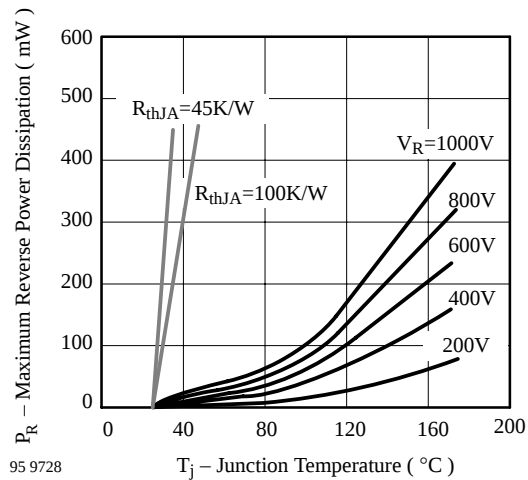


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

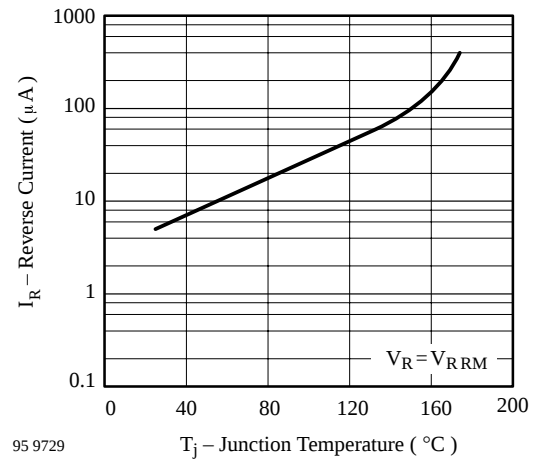


Figure 2. Max. Reverse Current vs. Junction Temperature

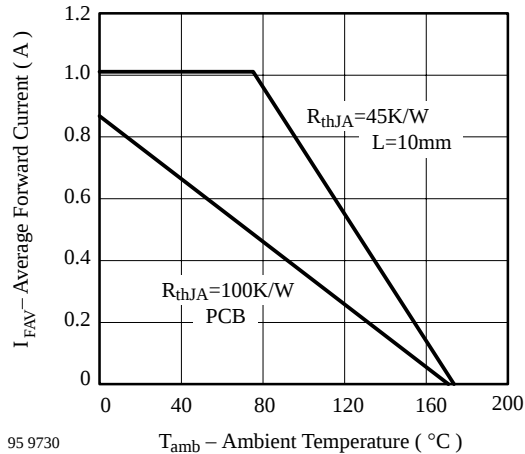


Figure 3. Max. Average Forward Current vs. Ambient Temperature

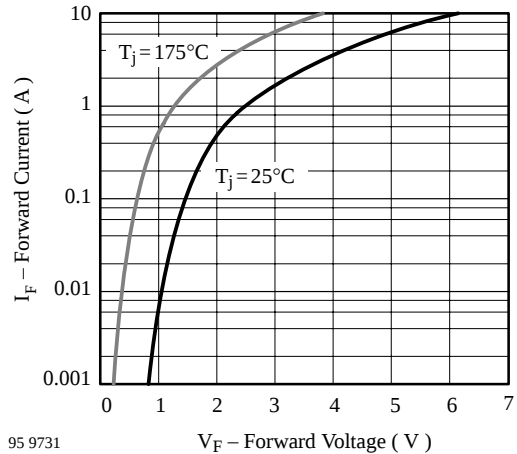


Figure 4. Max. Forward Current vs. Forward Voltage